

# Climate Change in Maine: The Problem, the Response and What All of Us Can Do

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## **Researchers continue to amass a tidal wave of scientific evidence showing the inextricable links between industrial activities and chaotic weather patterns.**

It's getting harder to deny that planet Earth is warming and humans are responsible for it. Now more than 60% of percent of people in the U.S. believe that the changing climate is directly impacting their communities,<sup>1</sup> and two thirds of Americans think government should do more on climate.<sup>2</sup> Though climate change continues to be argued along partisan lines nationally, in Maine public awareness is gaining. Now more than 70% of Mainers believe that climate change is a serious problem.<sup>3</sup> The signs are all around us. Thawing permafrost in Canada, forest infernos on the West Coast, a massive dead zone in the Gulf of Mexico, Earth's fastest warming ocean waters right here in the Gulf of Maine, and dramatic changes in Maine's growing season and drought-induced disaster zones in at least five of Maine's counties.

The clock is ticking and we need to take meaningful action to ensure a healthy and vibrant future for all of us, with a fine point on the next generations of organic farmers, gardeners and consumers.

Maine scientists are activating and mobilizing, compiling data to assess the impacts of rising land and ocean temperatures, along with sea levels. They're documenting the frequency and severity of storms and the associated environmental damage, along with the shortened winters and lengthened summers (by two weeks already!). They're tracking the increase in public health challenges, and the disproportionate impact of climate change on low-income communities and communities of color. They're recording dramatic changes in flora and fauna populations. And, of course, they're tracking greenhouse gas emissions. In Maine, most of these emissions come from

<sup>1</sup> Most Americans say climate change affects their local community, including 70% living near coast. Pew Research Center. June 29, 2020.

<sup>2</sup> Two-Thirds of Americans Think Government Should Do More on Climate. Pew Research Center. June 23, 2020.

<sup>3</sup> Results of poll conducted by Maine Conservation Voters and Moore Information. April 2019.

**Maine has a goal of reducing greenhouse gas emissions by 45% by 2030 and at least 80% by 2050. Governor Mills has ordered that Maine must achieve carbon neutrality by 2045.**

**Climate Science – Does it all seem too complicated and scary to ponder? World-renowned climate scientist Kimberly Nicholas breaks it down for us:**

- 1. It's Warming**
- 2. It's Us**
- 3. We're Sure**
- 4. It's Bad**
- 5. We Can Fix It!**

transportation, followed by residential, commercial and industrial sources. An essential publication for understanding the science of Climate Change in Maine is **Maine's Climate Future: 2020 Update**, published by the University of Maine's Climate Change Institute.

All of this research is informing the **Maine Climate Council**, an assembly of scientists, industry leaders, bipartisan local and state officials, and engaged citizens, which is mapping out a four-year plan to reduce emissions by 45% by 2030 and at least 80% by 2050. Governor Mills has ordered that Maine must achieve carbon neutrality by 2045. Six working groups and a scientific and technical subcommittee worked for several months this year developing climate mitigation and adaptation strategies for the Council. As this flier goes to press, the Council is reviewing recommendations from the working groups along with technical papers commissioned by the Council and more than 4,400 public comments. The Council intends to have a 4-Year Action Plan ready to deliver to Governor Mills and the Maine Legislature by December 1, 2020.



Though greenhouse gas emissions attributed to Maine's agricultural sector do not come close to those from transportation, MOFGA contends that organic management practices have an important role to play in mitigation and adaptation strategies for climate change. MOFGA participated in the Natural and Working Lands Working Group of the Maine Climate Council, and advocated for important incentives, technical assistance, research and funding mechanisms to help organic farmers and low impact foresters stay on their land while protecting and promoting healthy, carbon-sequestering soils, and providing essential habitat protections for Maine's wildlife.

As the Food and Agriculture Organization of the United Nations states, "Carbon sequestration, lower-input of fossil fuel dependant resources, and use of renewable energy all present opportunities for organic agriculture to lead the way in reducing energy consumption and mitigating the negative affects of energy emissions." Protecting healthy, carbon-sequestering soil is the cornerstone of organic agriculture. In addition to reducing atmospheric carbon, healthy organic soils increase crop resilience, allowing organic systems to tolerate, adapt to, and recover from extreme weather conditions. Organic management practices also exclude the use of synthetic fertilizers and pesticides, which are significant contributors to greenhouse gas emissions and can harm soil life. Supporting Maine's organic agriculture is essential for a climate-friendly future.

## **MOFGA supports global climate change initiatives to:**

- **Promote organic and sustainable husbandry of soils, crops, livestock and forests;**
- **Protect biodiversity;**
- **Build healthy soils;**
- **Improve and protect water quality;**
- **Minimize the transportation of agricultural products;**
- **Strengthen relationships between growers and consumers;**
- **Promote local food production and global food security; and**
- **Address the disproportionate impact on communities of color and low-income communities in Maine, across the United States, and around the world.**

# Three Climate Action Steps for MOFGA Supporters



- 1. Maximize local, organic foods in your diet.** It's good for your health, good for the health of the climate and Maine's environment, and good for the health of our agricultural economy. Find MOFGA-certified organic ingredients [here](#). Try growing your own organic food as well. MOFGA is ready with [resources to help you succeed](#). And, of course, always minimize food waste.
- 2. Invite members of the Maine Climate Council** to meet with your organization or community. You may submit an invitation to the Climate Council [here](#).
- 3. Talk with your elected representatives** at the municipal, state and federal levels and let them know that you want bold and swift action to address the climate crisis. They really do want to hear from you. Remember, they're working for you! Phone calls are much better than email. Call your town office, and your representatives in the Maine Legislature (800-301-3178), and members of our congressional delegation in Washington, DC (202-224-3121).

There are lots of opportunities to get involved in climate organizing efforts in Maine. As a member of Maine's Environmental Priorities Coalition, MOFGA participates in a broad coalition called Climate Maine.

Members of this group include: 350 Maine, A Climate to Thrive, Acadia Center, Appalachian Mountain Club, Atlantic Salmon Federation, Blue Green Alliance, Center for an Ecology Based Economy (CEBE), Citizens Climate Lobby, Climate and Economy Center, Coastal Enterprises Institute, Colby College Buck Center for Environmental Studies, Community Action Works, Conservation Law Foundation, Environment Maine, Environmental Health Strategy Center, Friends of Casco Bay, Gateway Community Services, Greater Portland Immigrant Welcome Center, Island Institute, Islesboro Islands Trust, Maine Association of Conservation Commissions, Maine Audubon, Maine Climate Action Now (MCAN), Maine Climate Table, Maine Conservation Alliance, Maine Council of Churches, Maine Council of Trout Unlimited, Maine Farmland Trust, Maine Immigrant Rights Coalition, Maine Lakes Society, Maine Ocean and Coastal Acidification, Maine Organic Farmers and Gardeners Association, Maine People's Alliance, Maine Public Health Association, Maine Rivers, Maine Unitarian Universalist State Advocacy Network, Natural Resources Council of Maine, Physicians for Social Responsibility - Maine Chapter, Renew New England, RESTORE: The North Woods, Sierra Club Maine, Southern Maine Conservation Collaborative, The Nature Conservancy, The Ocean Conservancy, The Trust for Public Land.

# Helpful Resources on Climate Change

- **6 Ways Environmental Advocates Can Change Climate Concern Into Action:** Many Americans are ready for meaningful progress on climate change — so how can they make it happen? This excellent article by **Ensia**, a solutions-focused nonprofit media outlet reporting on our changing planet, provides great advice for action steps that we can take to elevate discussion and understanding about climate change, and to prompt policymakers to prioritize climate-friendly public policy.
- **Assessing the Impacts Climate Change May Have on the State’s Economy, Revenues, and Investment Decisions: Summary Report.** Prepared for the State of Maine Department of the Governor’s Office of Policy Innovation and the Future (GOPIF). September 1, 2020. by Eastern Research Group, Inc. and Synapse Energy Economics.
- **Maine’s Climate Future - 2020 Update.** Published by the University of Maine’s Climate Change Institute. This is an essential document for understanding the current and projected impacts of climate on Maine’s ecosystems, public health and economy.
- **Maine Climate Council website.** This website provides information about the ongoing work of the Climate Council, including minutes from all meetings, priority recommendations, scheduled events and commissioned research.
- **A Climate Chronology: International Policy, U.S. Policy and Science.** Compiled and edited by Sharon Tisher - Professor of Environmental Law and Policy at the University of Maine; former Vice President Al Gore’s Climate Reality Leadership Corps; member of MOFGA’s Public Policy Committee; and past president of MOFGA’s Board of Directors.
- **The Climate Resistance Handbook** by Daniel Hunter. Foreword by Greta Thunberg. 2019. This guide lays out the steps for building a successful climate change movement in your community. It provides campaign tools, and suggestions for actions and tactics drawing on the successes of organizations and communities around the world, through many generations.
- **The Climate-Friendly Gardener: A Guide to Combating Global Warming from the Ground Up.** A wonderful pamphlet from the Union of Concerned Scientists, published in 2010, that shows shows you how to reduce the impact of climate change in your own backyard.
- **Scientific Assessment of Climate Change and Its Effects in Maine.** A report by the Scientific and Technical Subcommittee of the Maine Climate Council. August 2020.



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